



NTP Nonneoplastic Lesion Atlas

Thyroid Gland, Follicle - Dilation

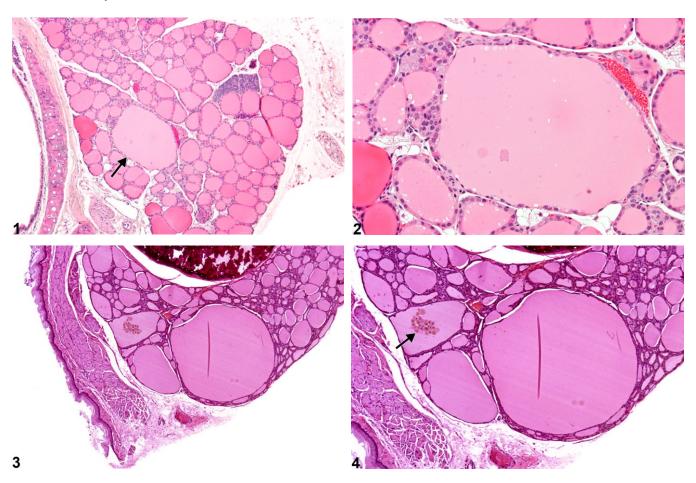


Figure Legend: Figures 1 Thyroid gland, Follicle - Dilation in a male B6C3F1 mouse from a chronic study. There is a single dilated follicle (arrow). **Figure 2** Thyroid gland, Follicle - Dilation in a male B6C3F1 mouse from a chronic study. This higher magnification of Figure 1 shows the flattened epithelium lining the dilated follicle. **Figure 3** Thyroid gland, Follicle - Dilation in a male F344/N rat from a chronic study. There is dilation of several adjacent follicles. **Figure 4** Thyroid gland, Follicle - Dilation in a male F344/N rat from a chronic study. Higher magnification of Figure 3 shows the flattened epithelium of the dilated follicles and pigmented macrophages in one of the follicles (arrow).

Comment: One or more dilated follicles occur as a common and age-associated change in mouse and rat thyroids. Affected follicles may have pale (Figure 1 and Figure 2) or absent colloid, and exfoliated cells may be present in the lumen. The dilated follicles are frequently seen at the periphery of the thyroid gland (Figure 3 and Figure 4). Dilated follicles are lined by low cuboidal to flattened epithelium.





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Recommendation: Documentation and grading of dilated follicles are recommended. The diagnosis should indicate whether the dilation is bilateral, with a severity grade based on the more severely affected thyroid gland. The presence of cells within the lumens of the dilated follicles need not be diagnosed separately unless warranted by severity.

References:

Hardisty JF, Boorman GA. 1990. Thyroid gland. In: Pathology of the Fischer Rat: Reference and Atlas (Boorman GA, Eustis SL, Elwell MR, Montgomery CA, MacKenzie WF, eds). Academic Press, San Diego, 519–536.

Abstract: http://www.ncbi.nlm.nih.gov/nlmcatalog/9002563

Hardisty JF, Boorman GA. 1999. Thyroid and parathyroid glands. In: Pathology of the Mouse: Reference and Atlas (Maronpot RR, Boorman GA, Gaul BW, eds). Cache River Press, Vienna, IL, 537–554.

Abstract: http://www.cacheriverpress.com/books/pathmouse.htm

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